

# Air-Cooled Automatics

## MIG Gun Configurator

Issued March 2008 • Index No. SPEC ACA-1.1

**Air-Cooled Automatic MIG gun without cable shown with Centerfire™ consumables**



### All Guns are Not Created Equal.

A MIG gun should be durable, easy to use and customized to your specific application. Our MIG guns put you in control: you choose the options you need and we'll build a gun to last.

**MIG gun configurator allows easy, precise customization** of just the right A/C Automatic MIG gun for your welding job.

**Amperage ratings at 100% duty cycle with CO<sub>2</sub> gas: 300 and 500 amps.**

**Power cable equipped guns available** in lengths to fit many applications.

**Necks available in numerous length and bend angles** for maximum accessibility.

**Contact tip options include Centerfire™ and Quik Tip™** and are available in wire sizes from .023" (0.6 mm) to 1/8" (3.2 mm).

**Direct plugs connect to wire feeders and machines from most major manufacturers.**

Made with  
Pride and without  
Compromise in the **USA**

### **Bernard®**


An Illinois Tool Works Company  
449 West Corning Road, Box 667  
Beecher, Illinois 60401 USA

Phone: 800-946-2281 (US Only) 708-946-2281 (Outside US)  
Fax: 708-946-6726  
For more information, visit us at [BernardWelds.com](http://BernardWelds.com)



# Guns Without Cable

<b>ACA</b>	<b>00</b>	<b>000</b>	<b>C</b>	<b>0</b>	<b>8</b>	<b>A</b>	<b>M</b>
<b>Gun Type</b> ACA No Neck	<b>Amperage</b> 00 No Cable	<b>Cable Length</b> 000 No Cable	<b>Barrel Length</b> A 3-5/8" (9.2 cm) B 6-5/8" (16.8 cm) C 9-5/8" (24.5 cm)	<b>Neck</b> 0 No Neck	<b>Contact Tip</b> 8 Centerfire 5 Quick Tip	<b>Wire Size</b> A .023" (0.6 mm) B .030" (0.8 mm) C .035" (0.9 mm) D .039" (1.0 mm) E .045" (1.2 mm) H .052" (1.4 mm) I 1/16" (1.6 mm) K 5/64" (2.0 mm) L 3/32" (2.4 mm) M 7/64" (2.8 mm) N 1/8" (3.2 mm)	<b>Direct Plug</b> M Miller® L Lincoln® T Tweco 4® W Tweco 5®
			See Fig. A on back page	<p>Note: Centerfire includes D-1 gas diffuser and N5818-C nozzle.</p> <p>Quick Tip includes D118Q gas diffuser and N1C58Q nozzle.</p>			




<b>Aluminum Wire Size</b>	
Q	.035" (0.9 mm)
R	3/64" (1.19 mm)
S	1/16" (1.6 mm)

## Building an Air-Cooled Automatic Gun

Bernard® makes it easy to customize the right gun for your specific application. Simply find the configurator that matches the power cable and neck set-up you require. Then, build a part number for a new Air-Cooled Automatic gun by selecting: **Gun Type, Amperage, Cable Length, Barrel Length, Neck, Contact Tip, Wire Size and Direct Plug.**

<b>ACB</b>	<b>00</b>	<b>000</b>	<b>C</b>	<b>D</b>	<b>8</b>	<b>B</b>	<b>M</b>
<b>Gun Type</b> ACB With Neck	<b>Amperage</b> 00 No Cable	<b>Cable Length</b> 000 No Cable	<b>Barrel Length</b> A 3-5/8" (9.2 cm) B 6-5/8" (16.8 cm) C 9-5/8" (24.5 cm)	<b>Neck</b> A Rotatable, 30° Short QT2-30 B Rotatable, 45° Short QT2-45 C Rotatable, 30° Medium QT3-30 D Rotatable, 45° Medium QT3-45 E Straight, 3" 180° QT-180-3 (7.6 cm) F Straight, 5" 180° QT-180-5 (12.7 cm)	<b>Contact Tip</b> 8 Centerfire 5 Quick Tip	<b>Wire Size</b> A .023" (0.6 mm) B .030" (0.8 mm) C .035" (0.9 mm) D .039" (1.0 mm) E .045" (1.2 mm) H .052" (1.4 mm) I 1/16" (1.6 mm) K 5/64" (2.0 mm) L 3/32" (2.4 mm) M 7/64" (2.8 mm) N 1/8" (3.2 mm)	<b>Direct Plug</b> M Miller® L Lincoln® T Tweco 4® W Tweco 5®
			See Fig. A on back page	<p>Note: Centerfire includes D-1 gas diffuser and N5818-C nozzle.</p> <p>Quick Tip includes D118Q gas diffuser and N1C58Q nozzle.</p>			



<b>Aluminum Wire Size</b>	
Q	.035" (0.9 mm)
R	3/64" (1.19 mm)
S	1/16" (1.6 mm)


# Guns With Cable

ACC	30	048	C	0	8	E	B
<b>Gun Type</b> ACC No Neck	<b>Amperage</b> 30 300 amp 50 500 amp	<b>Cable Length</b> 048 48" (1.2 m) 060 60" (1.5 m) 072 72" (1.8 m) 096 96" (2.4 m) 120 120" (3.0 m) 180 180" (4.6 m)	<b>Barrel Length</b> A 3-5/8" (9.2 cm) B 6-5/8" (16.8 cm) C 9-5/8" (24.5 cm) <b>Barrel Without Spring</b> D 3-5/8" (9.2 cm) E 6-5/8" (16.8 cm) F 9-5/8" (24.5 cm)	<b>Neck</b> 0 No Neck	<b>Contact Tip</b> 8 Centerfire 5 Quick Tip <small>Note: Centerfire includes D-1 gas diffuser and N5818-C nozzle. Quick Tip includes D118Q gas diffuser and N1C58Q nozzle.</small>	<b>Wire Size</b> A .023" (0.6 mm) B .030" (0.8 mm) C .035" (0.9 mm) D .039" (1.0 mm) E .045" (1.2 mm) H .052" (1.4 mm) I 1/16" (1.6 mm) K 5/64" (2.0 mm) L 3/32" (2.4 mm) M 7/64" (2.8 mm) N 1/8" (3.2 mm) <b>Aluminum Wire Size</b> Q .035" (0.9 mm) R 3/64" (1.19 mm) S 1/16" (1.6 mm)	<b>Direct Plug</b> B Bernard® M Miller® L Lincoln® T Tweco 4® E Euro® W Tweco 5®

See Fig. B on back page

Note: Other lengths available. Contact Customer Service for details.

See Fig. C on back page



## Air-Cooled Automatic Part Number


**ACD40060BD8IB** is an example of a typical configuration. It was built using the Guns With Cable and Neck configurator and consists of a 400 amp 60" power cable, 6-5/8" barrel, rotatable medium 45° neck, Centerfire™ 1/16" contact tip and Bernard® direct plug.

ACD	30	060	B	D	8	I	B
<b>Gun Type</b> ACD With Neck	<b>Amperage</b> 30 300 amp 50 500 amp	<b>Cable Length</b> 048 48" (1.2 m) 060 60" (1.5 m) 072 72" (1.8 m) 096 96" (2.4 m) 120 120" (3.0 m) 180 180" (4.6 m)	<b>Barrel Length</b> A 3-5/8" (9.2 cm) B 6-5/8" (16.8 cm) C 9-5/8" (24.5 cm) <b>Barrel Without Spring</b> D 3-5/8" (9.2 cm) E 6-5/8" (16.8 cm) F 9-5/8" (24.5 cm)	<b>Neck</b> A Rotatable, 30° Short QT2-30 B Rotatable, 45° Short QT2-45 C Rotatable, 30° Medium QT3-30 D Rotatable, 45° Medium QT3-45 E Straight, 3" 180° (7.6 cm) QT-180-3 F Straight, 5" 180° (12.7 cm) QT-180-5	<b>Contact Tip</b> 8 Centerfire 5 Quick Tip <small>Note: Centerfire includes D-1 gas diffuser and N5818-C nozzle. Quick Tip includes D118Q gas diffuser and N1C58Q nozzle.</small>	<b>Wire Size</b> A .023" (0.6 mm) B .030" (0.8 mm) C .035" (0.9 mm) D .039" (1.0 mm) E .045" (1.2 mm) H .052" (1.4 mm) I 1/16" (1.6 mm) K 5/64" (2.0 mm) L 3/32" (2.4 mm) M 7/64" (2.8 mm) N 1/8" (3.2 mm) <b>Aluminum Wire Size</b> Q .035" (0.9 mm) R 3/64" (1.19 mm) S 1/16" (1.6 mm)	<b>Direct Plug</b> B Bernard® M Miller® L Lincoln® T Tweco 4® E Euro® W Tweco 5®

See Fig. B on back page

Note: Other lengths available. Contact Customer Service for details.

See Fig. C on back page



# Barrel and Cable Length

FIGURE A

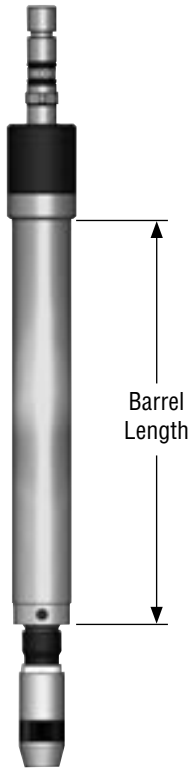


FIGURE B

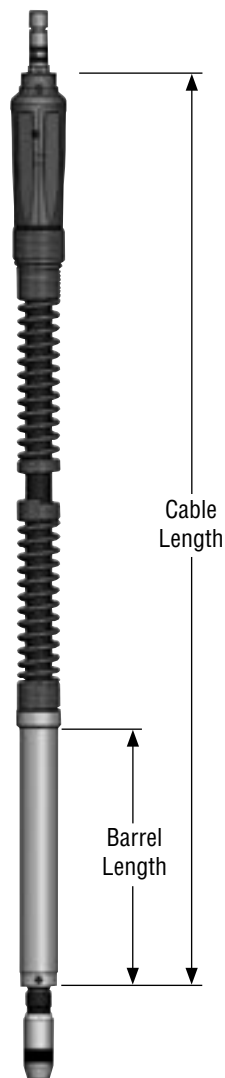
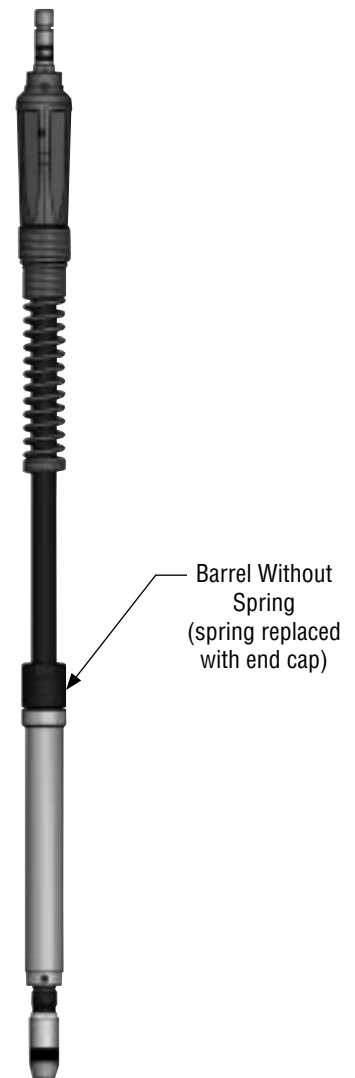


FIGURE C



## Pitch Rack

Pitch rack kit part number: 1880159



- Pitch rack kit includes 2 mounting screws and rack
- Note: only fits guns with 9-5/8" barrel
- 32 pitch